

# CALIFORNIA WATER PLAN, UPDATE 2013 PLANNING FOR AN UNCERTAIN FUTURE (SCENARIOS) AUGUST 22, 2011, 1 PM TO 4:30 PM

#### **Workshop Objectives**

- Solicit advice on the policy considerations relevant to evaluating regional resource management strategies in light of many future risks and uncertainties
- Outline key assumptions to guide the Update 2013 technical analysis to plan for an uncertain future

# **Glossary**

<u>Performance measure</u> - Quantitative measures used to evaluate the performance and compare resource management strategies.

**Resource management strategy** - A project, program, or policy that helps federal, State or local agencies manage water and related resources. Resource management strategies in the Water Plan are grouped by their intended outcomes: reduce water demand, improve operational efficiency and transfers, increase water supply, improve water quality, practice resource stewardship; and improve flood management. Although most of the resource management strategies have multiple potential benefits, any individual site-specific project or program within a resource management strategy may contribute only one, or a few of the benefits.

<u>Response package</u> – Combinations of different resource management strategies to be implemented to achieve regional water management objectives.

<u>Scenario</u> - Descriptions of alternative plausible future conditions outside the control of the policy-makers.

#### **Workshop Content**

#### 1. Introduction and Background

- Why we are here today
- Policy questions from June 29 AC meeting (handout)
- Case studies applying technical information to inform policy questions
  - Inland Empire Utilities Agency Climate vulnerability
  - Metropolitan Water District of Southern CA Supporting the Integrated Resource Plan

# 2. Meeting water management objectives

- Resource management strategies from Update 2009
- Describe how resource management strategies were grouped as sample response packages in WEAP Proof of Concept

## EXERCISE: Discuss statewide policy linkages to resource management strategies

- What is your Top Five List of resource management strategies to be considered in Update 2013?
- Are there thematic ways to group resource management strategies into response packages that make sense from a statewide policy perspective?
- How many different land use densities and variations should we consider in Update 2013;
   and what would they look like?
- How many different levels of environmental water (for stream flows and habitat restoration beyond existing requirements) should we consider in Update 2013; and what would be those levels?

# 3. Evaluating performance of resource management strategies

- Water management objectives from Update 2009
- Sample performance measures from WEAP Proof of Concept

<u>EXERCISE</u>: Discuss statewide policy linkages to evaluating the performance of resource management strategies.

- What information (system behavior, costs, benefits, etc) do you need to decide whether
  or not to invest in a particular (or bundle of) resource management strategies (AKA
  response package)?
- What information do you need to assess the tradeoffs between different and potentially conflicting water management objectives?
- Which temporal scales (daily, monthly, annual, etc) and planning horizons (2020, 2050, 2100) are most useful to your decisions about investing in resource management strategies?
- Which spatial scales (water district, IRWM region, county, city, hydrologic region, statewide) are most useful to your decisions about investing in resource management strategies?

## 4. Describing how future uncertainties may affect decisions

- Effect of population growth uncertainty on meeting future water management objectives
- Effect of climate uncertainty on meeting future water management objectives

EXERCISE: Discuss how to best characterize future uncertainty as part of Update 2013.

- How many levels of future population are sufficient to characterize uncertainty surrounding future population growth in Update 2013; and what would they be?
- What information about future climate change would help you make decisions when evaluating alternative bundles of resource management strategies (response packages)?

## 5. Next Steps

- Incorporate workshop input into Update 2013 assumptions and analytical approach for evaluating future scenarios.
- Identify IRWM Regional Water Management Groups (find volunteers) in Sacramento River, San Joaquin River, and Tulare Lake Hydrologic Regions to offer regional resource management strategies (response packages)
- Conduct WEAP simulations using an iterative process with RWMGs.
- Present interim results to SWAN and other Update 2013 venues.